UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,239	04/01/2004	Jeffery W. Janzen	MICS:0103 (02-1327)	9165

7590 12/14/2006

Michael G. Flether
Fletcher Yoder
P.O. Box 692289
Houston, TX 77269-2289

EXAMINER	
RAHMAN, FAHMIDA	

ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/816,239	JANZEN ET AL.	
	Examiner	Art Unit	
	Fahmida Rahman	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This final action is in response to communications filed on 9/29/2006.

2. Claim 1 has been amended, no new claims have been added and no claims have been canceled. Thus, claims 1-32 are pending.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 of pending application are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No.7035159). Although the conflicting claims are not identical, they are not patentably distinct from each other because both of the invention discloses a system

with memory module comprising plurality of memory devices with non-volatile memory device that stores operating current values for the memory devices. For example, claim 25 of pending application recites the limitations "a memory module comprising plurality of volatile memory devices and a non-volatile memory device having operating current values uniquely corresponding to each of memory devices", which can be found in claims 1-5 of issued patent. For claims 26-28 of pending application, claims 4, 5 and 3 of the issued patent disclose the invention.

Claims 1-32 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10816241. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the applications recite a memory module comprising plurality of volatile memory devices and a non-volatile memory device having operating current values stored thereon corresponding to the plurality of volatile memory devices. For example, the limitations of claim 21 of pending application are present in claim 18 of the co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trick (US Patent 5995405), in view of Abrahams et al (US Patent Application Publication 2004/0078454), further in view of Nerl (US Patent Application Publication 20020016897)

For claim 1, Trick teaches the following limitations:

A method of configuring a system comprising: reading values from a non-volatile memory device on a memory module (lines 35-42 of column 1), wherein the memory module comprises a plurality of volatile memory devices (lines 20-27 of column 1), and wherein the operating parameters uniquely corresponding to a lot in which the volatile memory devices were manufactured (EPROM is associated with the IMM. Thus, EPROM uniquely identifies the lot comprising plurality of volatile memory devices); and configuring the system in accordance with the values from the non-volatile memory device on the memory module (lines 39-42 of column 1).

Trick does not teach the following limitations:

Reading operating current value from the non-volatile memory.

Abrahams et al disclose the following limitations:

A method of configuring a system comprising: reading operating current values from a non-volatile memory device on a memory module (lines 13-15 of [0009] of page 1 mention that the non-volatile memory stores input current) and configuring the system in accordance with the operating current values from the non-volatile memory device on the memory module ([0032] of page 3).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick and Abrahams et al. One ordinary skill in the art would be motivated to have the non-volatile memory comprising operating current corresponds to the components, since that would ensure if a component (i.e., volatile memory) is operating within prescribed range. The component of Abrahams et al that stores the operating currents is an FRU ([0009] of page 1). It is well known in the art that a DIMM can be an FRU (lines 12-13 of [0006] of page 1 of Nerl). Thus, the system of Abraham et al can have DIMM as a component, where the associated non-volatile memory of the component can store the operating currents.

For claim 2, EPROM of Trick is the serial presence detect device (lines 34-36 of column 1).

For claim 3, Trick teaches the dual inline memory module (lines 25-30 of column 1).

For claim 4, Trick teaches reading values during booting (lines 39-42 of column 1).

For claim 5, lines 12-19 of page 1 of Abrahams et al mention that the current operating condition is compared with specified operating condition and an error message is sent if the component is operating outside of the specified value. Thus, the specified values are the threshold values of the system.

For claim 21, Trick teaches the following limitations:

a memory module (lines 35-42 of column 1), wherein the memory module comprises a plurality of volatile memory devices (lines 20-27 of column 1), and wherein the operating parameters uniquely corresponding to a lot in which the plurality of the volatile memory devices were manufactured stored thereon (EPROM is associated with the IMM. Thus, EPROM uniquely identifies the lot comprising plurality of volatile memory devices);

Trick does not teach the following limitations:

Non-volatile memory device having operating current values

Abrahams et al disclose the following limitations:

A memory module comprising a non-volatile memory device having operating current values of the component (lines 13-15 of [0009] of page 1 mention that the non-volatile memory stores input current).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick and Abrahams et al. One ordinary skill in the art would be motivated to have the non-volatile memory comprising operating current corresponds to the component, since that would ensure if a component (i.e., volatile memory) is operating within prescribed range. The component of Abrahams et al that stores the operating currents in the non-volatile memory is an FRU ([0009] of page 1). It is well known in the art that a DIMM can be an FRU (lines 12-13 of [0006] of page 1 of Nerl). Thus, the system of Abraham et al can have DIMM as a component, where the associated non-volatile memory of the component can store the operating currents.

For claims 22-24, note lines 19-37 of column 1 of Trick.

Claims 7-11, 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trick (US Patent 5995405), in view of Abrahams et al (US Patent Application Publication 2004/0078454)

For claim 7, Trick teaches the following limitations:

A method of configuring a system comprising: reading values from a non-volatile memory device on a memory module (lines 35-42 of column 1), wherein the memory module comprises a plurality of volatile memory devices (lines 20-27 of column 1), and wherein the operating parameters uniquely corresponding to each of the plurality of memory devices (EPROM is associated with the IMM. Thus, EPROM uniquely identifies

each of the plurality of volatile memory devices); and configuring the system in accordance with the values from the non-volatile memory device on the memory module (lines 39-42 of column 1).

Trick does not teach the following limitations:

Reading operating current value from the non-volatile memory.

Abrahams et al disclose the following limitations:

A method of configuring a system comprising: reading operating current values from a non-volatile memory device on a memory module (lines 13-15 of [0009] of page 1 mention that the non-volatile memory stores input current), wherein the memory module (101) comprises a plurality of memory devices (100A-100I), and wherein the operating current parameters comprise operating currents uniquely corresponding each of the plurality of memory devices (150 uniquely corresponds to 100G); and configuring the system in accordance with the operating current values from the non-volatile memory device on the memory module ([0032] of page 3).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick and Abrahams et al. One ordinary skill in the art would be motivated to have the non-volatile memory comprising operating current corresponds to the components, since that would ensure if a component (i.e., volatile memory) is operating within prescribed range.

For claim 8, EPROM of Trick is the serial presence detect device (lines 34-36 of column 1).

For claim 9, Trick teaches the dual inline memory module (lines 25-30 of column 1).

For claim 10, Trick teaches reading values during booting (lines 39-42 of column 1).

For claim 11, lines 12-19 of page 1 of Abrahams et al mention that the current operating condition is compared with specified operating condition and an error message is sent if the component is operating outside of the specified value. Thus, the specified values are the threshold values of the system.

For claim 25, Trick teaches the following limitations:

a memory module (lines 35-42 of column 1), wherein the memory module comprises a plurality of volatile memory devices (lines 20-27 of column 1), and wherein the operating parameters uniquely corresponding to each of the plurality of the volatile memory devices stored thereon (EPROM is associated with the IMM. Thus, EPROM uniquely identifies the plurality of volatile memory devices);

Trick does not teach the following limitations:

Non-volatile memory device having operating current values

Abrahams et al disclose the following limitations:

a non-volatile memory device on a memory module (lines 13-15 of [0009] of page 1 mention that the non-volatile memory stores input current), wherein the memory module (101) comprises a plurality of memory devices (100A-100I), and wherein the operating current parameters comprise operating currents uniquely corresponding to each of the memory device (150 uniquely corresponds to 100G);

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick and Abrahams et al. One ordinary skill in the art would be motivated to have the non-volatile memory comprising operating current corresponds to the components, since that would ensure if a component (i.e., volatile memory) is operating within prescribed range.

For claims 26-28, note lines 19-37 of column 1 of Trick.

For claim 29, Trick teaches the following limitations:

A computer system comprising: a processor (202 in Fig 4) and a memory module (lines 35-42 of column 1), wherein the memory module comprises a plurality of volatile memory devices (lines 20-27 of column 1), and wherein the operating parameters uniquely corresponding to each of the plurality of the volatile memory devices stored

thereon (EPROM is associated with the IMM. Thus, EPROM uniquely identifies the lot comprising plurality of volatile memory devices);

Trick does not teach the following limitations:

Non-volatile memory device having operating current values

Abrahams et al disclose the following limitations:

a non-volatile memory device on a memory module (lines 13-15 of [0009] of page 1 mention that the non-volatile memory stores input current), wherein the memory module (101) comprises a plurality of memory devices (100A-100I), and wherein the operating current parameters comprise operating currents uniquely corresponding to each of the memory device (150 uniquely corresponds to 100G);

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick and Abrahams et al. One ordinary skill in the art would be motivated to have the non-volatile memory comprising operating current corresponds to the components, since that would ensure if a component (i.e., volatile memory) is operating within prescribed range.

For claims 30-32, note lines 19-37 of column 1 of Trick.

Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trick (US Patent 5995405), in view of Abrahams et al (US Patent Application Publication 2004/0078454), further in view of AAPA.

Neither Trick nor Abrahams et al teach the throttling of the memory. Applicant admits that throttling of memory if exceeds threshold is an available technique in the art (lines 11-19 of page 3).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Trick, Abrahams and AAPA. One ordinary skill in the art would be motivated to throttle the memory, since that ensures the cooling of memory device.

Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahams et al (US Patent Application Publication 2004/0078454), in view of Nerl (US Patent Application Publication 20020016897)

For claim 13, Abrahams et al teach the following:

A method of manufacturing a memory module (101) comprising: measuring operating current values in each of a plurality of memory devices (lines 13-15 of page 1); storing each of the operating current values corresponding to each of the plurality of memory devices in a non-volatile memory device (each current is stored in a non-volatile

memory of each component 100G); and forming a memory module (101) comprising each of the plurality of memory devices and the non-volatile memory device (Fig 1).

Abraham et al do not teach that the plurality of memory devices can be plurality of volatile memory devices. However, Abrahams et al teach that the plurality of memory devices can be plurality of FRU.

Neil teaches that a DIMM can be an FRU.

It would have been obvious for one ordinary skill in the art at the time the invention was made to have the DIMM as an FRU in the system of Abraham et al, since it is convenient to use DIMM as an FRU for it's hot swapping ability.

For claims 14-16, DIMMs are associated with SPD, DRAM and dual-in line memory.

For claim 17, Abrahams et al teach the following:
A method of manufacturing a memory module (101) comprising: measuring operating current values in each of a plurality of memory devices, wherein the plurality of memory corresponds to a single manufacturing lot (lines 13-15 of page 1); storing operating current values in a non-volatile memory device (current is stored in a non-volatile memory of each component 100G); and forming a memory module (101) comprising each of the plurality of memory devices and the non-volatile memory device (Fig 1).

Abraham et al do not teach that the plurality of memory devices can be plurality of volatile memory devices. However, Abrahams et al teach that the plurality of memory devices can be plurality of FRU.

Neil teaches that a DIMM can be an FRU.

It would have been obvious for one ordinary skill in the art at the time the invention was made to have the DIMM as an FRU, since it is convenient to use DIMM as an FRU for it's hot swapping ability.

Abraham et al as modified by Neil do not teach calculation of average current. One ordinary skill in the art would have been motivated to store average current corresponding to the lot in the non-volatile memory depending on his design choice.

For claims 18-20, DIMMs are associated with SPD, DRAM and dual-in line memory.

Response to Arguments

Applicant's arguments filed on 9/29/2006 have been fully considered but they are not persuasive.

Regarding claims 1-5 and 21-24, applicant argues that the cited art does not teach operating currents uniquely corresponding to a lot in which volatile memory devices were manufactured. Although Trick discloses the configuration information stored on EEPROM, but fails to teach that the configuration information is lot-specific. Abrahams does not remedy the deficiencies as Abrahams provides the operational parameters to be component specific, not lot-specific.

Examiner disagrees. Applicant admits that Abrahams provides that the operational parameters may be specific to each type of component. [0009] of page 1 of Abrahams mentions that components may be FRU that includes a non-volatile memory that stores values for operational parameters of the component. The operating parameters may indicate input current or other operating conditions for the component ([0009] of page 1). Therefore, FRU stores the operating current values in the non-volatile memory and the current uniquely corresponds to the lot of FRU. When EEPROM stores operating parameters specific to FRU, the storage is considered to lot-specific as FRU represents the lot. Thus, Abrahams teaches operating currents uniquely corresponding to a lot. Abrahams does not teach that the volatile memory devices were manufactured on lot. Trick, in view of Nerl, teach that DIMM can be FRU, where DIMM comprises a plurality of volatile memory devices with a corresponding non-volatile device that store configuration information uniquely corresponding to the lot (lines 30-42 of column 1 of Trick). The teaching of Abrahams can be incorporated into Trick to store operating currents uniquely corresponds to a lot in the non-volatile memory of DIMM to determine

if the component or lot (i.e., FRU comprising DIMM) is operating outside the operating conditions. Therefore, the cited art teaches all the required limitations of claim 1 and claim 21.

Regarding claims 7-11 and 25-32, applicant argues that neither Trick nor Abrahams teach the utilization of operating currents uniquely corresponding to each of a plurality of memory devices.

Examiner disagrees. Abrahams teaches utilization of operating currents ([0009], [0022]) uniquely corresponding to each of a plurality of memory devices (100A-100I). However, memory modules are not volatile in Abrahams and operating current is read from plural non-volatile memories instead of one non-volatile memory as recited in claims. Trick teaches storing configuration parameters in non-volatile memory corresponding to plural volatile memories on a lot. In other words, Trick teaches storing lot specific information in a non-volatile memory that corresponds to plural volatile memories. Examiner acknowledges that the lot specific information of Trick is not the operating current. But, the non-volatile memory can store the operating currents of plural memories as explained in Abrahams. Therefore, Trick, in view of Abrahams, teaches the required limitations of claims 7-11 and 25-32.

Regarding claims 6 and 12, applicant further argues that the passages relied upon by the examiner is not an admission of prior art as the first paragraph in the background

section of applicant's disclosure specifically indicates that the background section should not be read as admissions of prior art.

Examiner disagrees. Although the first paragraph of the Related Art section mentions that these statements should not be read as admission of prior art, the same first paragraph mentions that the discussion in this section provides background information of the present invention. Therefore, applicant is describing such statements as background of present invention, or prior art. However, these statements will not be considered as admission of prior art (unless it falls one of the statutory categories) if the prior art is the work of same inventive entity. In absence of credible explanation, examiner should treat them as work of another (MPEP 2129). Therefore, applicant needs to explicitly mention whether the background work is his own work to overcome the rejection under 35 USC 103.

Regarding claims 13-20, applicant further argues that Abrahams does not disclose measuring operating current values in each of a plurality of memory devices and storing each of the operating current values in a non-volatile memory device. Applicant further asserts that Nerl fails to remedy the deficiencies of Abrahams.

Examiner disagrees. Abrahams discloses measuring operating current values ([0009] of page 1 mentions that operational parameters may indicate input current) in each of a plurality of memory devices (100A-100I in Fig 1) and storing each of the operating

current values in a non-volatile memory device (operating current of a memory device is stored in corresponding non-volatile memory 150 as shown in Fig 1). However, Abrahams does not disclose that the memory devices are volatile. Nerl discloses DIMM comprising EEROM where EEROM stores information specific to volatile memory devices on DIMM ([0008]). Therefore, Abrahams, in view of Nerls, teaches the required claimed limitations.

Regarding claim 17, applicant argues that Abrahams does not disclose that the operating current values are measured for a plurality of volatile memory devices that correspond to a single manufacturing lot. Applicant further asserts that Nerl fails to remedy the deficiencies of Abrahams.

Examiner disagrees. As discussed above, Abrahams stores operating current in non-volatile memory of corresponding memory device. All the memory devices are built on single lot 101 of Fig 1 of Abrahams. Nerl provides the teaching of providing volatile memory devices corresponding to single manufacturing lot as DIMM comprises plurality of volatile memory on a single lot.

Regarding claim 17, applicant further argues that the Examiner does not provide any convincing reason as to why one of ordinary skill in the art would have found the claimed invention obvious.

Examiner provides the reason as to why the ordinary skill would be motivated to combine the teachings of cited art to find the claimed invention obvious. Abrahams provided one reason for storing operating currents: determining whether the component is operating outside the acceptable range of operating currents. Another reason may be calculating power from average operating currents (lines 10-17 of column 3 of US Patent 5768145). Storing average operating currents in a database to calculate power consumption is well known in the art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fahmida Rahman
Examiner
Art Unit 2116

***

A. ELAMIN
PRIMARY EXAMINER
12/10/06